

Claims

1. A stacked packing for a heat-exchange or mass-transfer column with at least one packing (1) comprised of several layers (2 and 3), characterized in that the lower packing (3) has packing layers (4b) that are of greater density and therefore have a greater surface area than other layers (4a) of the same packing (3).

2. The packing according to claim 1, characterized in that the packing layers (4, 4a, and 4b) are oriented transversely to the horizontal position of the packing (2, 3).

3. The packing according to claim 1 or 2, characterized in that the packing layers (4, 4a, and 4b) are set at an acute angle or perpendicular.

4. The packing according to one of the preceding claims, characterized in that the lower packing (3) of greater density has a larger surface area than the overlying packings (3).

5. The packing according to one of the preceding claims, characterized in that the packing layers (4b) of higher surface area have a surface area that is 2 to 10 times the gross specific surface area of the other packing layers (4).

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6. The packing according to one of the preceding claims, characterized in that two packing layers (4b) of greater surface area are mounted directly against each other and between these layers of greater surface area there are 1 to 10, preferably 3 to 6 layers (4a) layers (4a) with a smaller surface area.

7. The stacked packing according to claims 1 to 3, characterized in that the packing layers (4b) with the larger surface area are made of materials that have perforations, in particular expanded metal or wire mesh.

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8. The packing according to one of the preceding claims, characterized in that both packing types (4a and 4) have at their lower regions over about 10 to 50% of their height perforations in greater number and/or of greater diameter that permit passing of fluid from the narrow interstices into the wider passages.

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9. The packing according to one of the preceding claims, characterized in that the free flow cross section is about 5 to 20% of the overall surface area of the packing layer.

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10. The packing according to one of the preceding claims, characterized in that the tight packing layers (4b) project downward from a lower face of the lower packing (3) about 2 to 100 mm, preferably 5 to 40 mm.

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11. The packing according to one of the preceding claims, characterized in that the packing layers (4b) of greater surface area project at their lower ends about 2 to 100 mm, preferably 5 to 40 mm, and are set at their upper ends about 2 to 100 mm, preferably 5 to 40 mm, deeper than the other packing layers (4a).

12. The use of the packing according to one of the preceding claims for carrying out distillation, absorption, gas scrubbing, extraction distillation, or reactive distillation.

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13. The use of the packing according to one of the preceding claims for separating liquids in columns.